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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. A-5
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EXAMINER

ART UNIT	PAPER NUMBER
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6

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/558,329

Applicant(s)

Stern et al.

Examiner

Cheryl Juska

Group Art Unit
1771



- ☐ Responsive to communication(s) filed on _____
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11, 453 O.G. 213

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a)

Disposition of Claim

- ☒ Claim(s) 1-87 is/are pending in the application
- Of the above claim(s) _____ is/are withdrawn from consideration
- ☐ Claim(s) _____ is/are allowed
- ☒ Claim(s) 1-87 is/are rejected
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawings filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d)
- ☐ All ☐ Some ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Reissue Applications

1. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 30-87 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The dual layer of hydrophobic/hydrophilic felt web critical or essential to the practice of the invention, but not included in the claims is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Applicant cites various sections of the original specification for providing support for the new claims, which do not limit the felt web to the combination of hydrophobic and hydrophilic layers. However, the Examiner respectfully disagrees that said specification provides adequate support for the new claims. In particular, it is noted that the *Abstract*, *Summary of the Invention* (col. 1, lines 47-51), *Figures 2, 5, and 6-8* (reference numbers 14 and 16), and the *Detailed Description* (specifically, col. 2, lines 31-47 and col. 3, lines 20-23) all teach that the felt web is comprised of a hydrophobic component and a

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hydrophilic component. Additionally, the *Summary* recites, "The present invention provides an improved fluid-retaining fabric such as may be substituted for the facing fabric and felt of the prior incontinent pads..." (col. 1, lines 44-46). It is also noted that just prior to said recitation, the specification teaches the prior art incontinent pads are comprised of a facing fabric, such as the Comply[®] fabric having both hydrophobic and hydrophilic components (col. 1, lines 28-35). Thus, it is asserted that the original disclosure does not provide enablement for the newly claimed invention in that the hydrophobic and hydrophilic components of the felt web are critical or essential to the practice of the invention. Additionally, it is asserted that the claims as presently written are broader in scope than the disclosure. For example, said claims currently read on a web of only hydrophobic fibers or even inorganic fibers, neither of which are disclosed in the specification and neither of which would be suited for utility as an incontinent pad.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 51 is indefinite for the use of the phrase "the felt being adapted to retain fluid therein." It is unclear what Applicant intends to encompass by the term "adapted."

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Due to lack of an explicit definition in the specification, for the purposes of examination, Applicant's claim term "felt web" is interpreted in the broad sense as any nonwoven, web, or batting comprising discontinuous or staple fibers.

8. Claims 30-36, 51-56, 65, and 67-69 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,026,129 issued to Sternlieb.

Sternlieb discloses a composite fabric comprising a nonwoven layer and woven reinforcing scrim, wherein said nonwoven and scrim are stitch bonded into said composite fabric (abstract). The nonwoven is preferably made from hydrophilic fibers (col. 2, lines 20-34). The stitch bonding is preferably a tricot stitch made by a warp knitting machine, such as an "Arachne" machine (col. 2, line 57-col. 3, line 2). The yarn for said stitch bonding is preferably spun polyester, which inherently has hydrophobic properties (col. 3, lines 3-4). It is asserted that the claimed overlaps, underlaps, upper flat stitch, and lower loop stitch are inherent to the disclosed stitch bonding of Sternlieb. Thus, it can be seen that claims 30-36, 51-56, 65, and 67-69 are anticipated by the cited Sternlieb patent.

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9. Claims 30-37 and 51-64 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,181,514 issued to Lefkowitz et al.

Lefkowitz discloses at least one nonwoven batt of relatively brittle fibers which is stitch bonded (abstract and col. 2, lines 55-61). The nonwoven batt may be made of one web folded upon itself or may comprise more than one batt (col. 2, lines 61-68). The stitch bonding yarns are preferably metallic or glass mono- or multi-filaments, both of which inherently possess hydrophobic properties (col. 3, lines 1-4). The brittle fibers of the nonwoven batt may be glass, silica, ceramic, carbon, or graphite, all of which would inherently fall into the classification of hydrophobic fibers (col. 4, lines 19-24). The batt may be reinforced with a scrim (col. 3, lines 12-15). Figures 1, 2, and 5 show the claimed underlaps, overlaps, flat-stitch, and loop-stitch.

With regard to Applicant's limitations in claim 51 that the felt web is "adapted to retain fluid therein" and the stitch bonding yarns being hydrophobic "whereby to assist in wicking fluid into the felt web," it is asserted that neither limitation is hereby given patentable weight. Specifically, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138. Similarly, it has been held that the functional "whereby" statement does not define any structure and accordingly can not serve to distinguish a claimed invention from the prior art. *In re Mason*, 114 USPQ 127, 44

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CCPA 937 (1957). Thus, it can be seen that the cited Lefkowitz patent anticipates Applicant's claims 30-37 and 51-64.

10. Claims 30, 32-37, 51, 53-56, 58, 59, 61-66, 68, and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,675,226 issued to Ott.

Ott discloses a stitch bonded composite wiper comprising an outer nonwoven layer of thermoplastic fibers and an inner layer of cellulose webs (abstract). In one embodiment, the thermoplastic layer comprises meltblown discontinuous microfibers of polypropylene (hydrophobic) (claim 9, col. 6, lines 43-47). The layers are stitch bonded with polyester yarns (hydrophobic) on either a Maliwatt or Malimo stitching machine (col. 3, lines 5-11), which would inherently produce Applicant's claimed underlaps, overlaps, flat-stitch, and loop stitch. Thus, it can be seen that the cited Ott patent anticipates Applicant's claims 30, 32-37, 51, 53-56, 58, 59, 61-66, 68, and 69.

11. Claims 30, 32-36, 39, 41, 42, 46-51, 53-56, 65, 68, 69, 80, 83, 84, 86, and 87 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,356,402 issued to Gillies et al.

Gillies discloses a reusable incontinence pad comprising an interior hydrophobic layer, a median carded and crosslapped nonwoven layer of hydrophilic rayon fibers, and an outer layer of a waterproof polyurethane film (abstract and col. 5, lines 1-3). The hydrophilic layer is stitch bonded with hydrophobic polyester thread using a Mali, Mallymo, or Arachni stitch bonding machine (abstract and col. 5, lines 7-11 and lines 23-27), which inherently provides Applicant's claimed overlaps, underlaps, flat-stitch, and loop-stitch. The interior layer is preferably of web of

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hydrophobic polyester fibers (col. 3, lines 38-40). The outer barrier layer is bonded to the hydrophilic layer (col. 6, lines 58-60). Additionally, the outer layer may comprise a dual layer of the polyurethane film and a fabric layer (col. 6, lines 48-55). Furthermore, Gillies teaches the three layers are finished with a binding stitch around the periphery of said layers (col. 7, lines 1-5). Thus, it can be seen that Applicant's claims 30, 32-36, 39, 41, 42, 46-51, 53-56, 65, 68, 69, 80, 83, 84, 86, and 87 are anticipated by the cited Gillies patent.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1, 3-9, 12, 14-20, 23, 26-29, 37, 38, 43, 58, 61-64, 66, 70, 71, 73, 74, 76-79, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over obvious over the cited Gillies patent in view of the cited Ott patent.

Gillies teaches that the hydrophobic layer comprises "a soft hydrophobic web of polyester fibers which has been warp knitted tricot stitched to give the desired porosity" (col. 6, lines 7-10). Thus, Gillies teaches stitching the hydrophobic web and also separately stitching the hydrophilic web. Since it is well known in the art to stitchbond together more than one layer of nonwoven webs, and in particular, to stitchbond together a hydrophobic and hydrophilic web, as is evidenced

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by the cited Ott patent, it would have been obvious to one of ordinary skill in the art to employ a single stitch bonding process, rather than the two disclosed by Gillies. Motivation to do so would be to eliminate a process step, while maintaining the desired porosity of the hydrophobic layer, and to improve the integrity of the two layers.

With respect to the claim limitation that the stitchbonded yarn is hydrophilic, it is noted that Gillies teaches the use of polyester stitching yarns. However, Ott teaches the stitchbonding yarn may be polyester, rayon, or a blended yarn (col. 2, lines 34-37), wherein rayon yarns are inherently hydrophilic yarns. Therefore, said claims are rejected as being obvious over the cited prior art.

14. Claims 10, 11, 21, 22, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Gillies patent in view of the cited Ott patent, as applied to claims 1, 12, and 51 above.

Said claims limit the stitchbonding yarn to being either a continuous filament yarn or a spun yarn. Gillies and Ott are silent with respect to the yarn type. Both patents merely teach the fiber type of said yarn and the yarn denier. Thus, without a specific teaching to either a filament or spun yarn, one of ordinary skill in the art would presume that both yarn types are suitable for the invention, as long as said yarn meets the fiber and denier requirements taught by Gillies and Ott. Applicant is hereby given Official Notice that filament and spun yarns are the two basic yarn types. The choice of which yarn type to employ in any given application is within the skill level of one versed in the textile arts. Factors which might determine said choice are availability, cost, and

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strength requirements. Therefore, the use of a filament or spun yarn in the Gillies and Ott inventions would have been obvious to one of ordinary skill in the art. Hence, said claims are rejected.

15. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Gillies patent in view of the cited Ott patent, as applied to claim 23 above, and in further view of the cited Lefkowitz patent and US 4,128,686 issued to Kyle et al.

Claim 25 limits the first and second webs to be needlepunched into a single web. Although neither Gillies nor Ott teach needlepunching the webs before stitchbonding, it is well-known in the art to needlepunch layers of webs together before stitchbonding. For example, Lefkowitz recites, "Prior to stitch-knitting, it is generally necessary to support the batt or increase the batt integrity so that it can be metered into the stitch-knitting machine without damage or separation." (Col. 4, lines 55-58). Lefkowitz prefers needling said batt to obtain the desired integrity (col. 4, lines 58-61). Additionally, Kyle teaches the use of an needlepunched integral nonwoven felt comprising one layer of absorbent fibers and a second layer of non-absorbent fibers for use in an incontinence pad (col. 6, lines 18-30). Thus, it would have been obvious to one of ordinary skill in the art to needlepunch the batt or web layers of the Gillies or Ott invention together before stitchbonding, in order produce an integral web with sufficient integrity to be fed into a stitchbonding machine. Therefore, claim 25 is rejected as being obvious over the cited art.

16. Claims 40 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Gillies patent in view of EP 261 904 issued to Taylor. Claims 24 and 72 are rejected under 35

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U.S.C. 103(a) as being unpatentable over the cited Gillies patent in view of the cited Ott patent, as applied to claims 23 and 70 above, and in further view of EP 261 904 issued to Taylor.

Gillies teaches the barrier layer is mounted over the hydrophilic absorbent layer, but is silent with respect to the use of an adhesive to mount said barrier layer. However, it is well known in the art to adhesively mount a barrier layer to an absorbent layer. For example, Taylor teaches the use of a urethane adhesive to adhere a barrier layer to an absorbent layer of an incontinent pad (col. 7, lines 34-36). Thus, it would have been obvious to one of ordinary skill in the art to employ an adhesive, as is known in the art and evidenced by Taylor, in order to attach the Gillies barrier layer to the absorbent layer, with the expectation of obtaining an integrated laminate incontinent pad.

17. Claims 31, 44, 45, 52, 67, and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Gillies patent in view of the cited Sternlieb patent. Claims 2, 13, 59, 60, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Gillies patent in view of the cited Ott patent, as applied to claims 1, 12, 58, and 70 above, and in further view of the cited Sternlieb patent.

Gillies does not explicitly teach the use of a scrim layer for reinforcement of the absorbent layer. However, said use of a reinforcement is well known in the art, as is evidenced by the cited Sternlieb patent. Thus, it would have been obvious to one of ordinary skill in the art to employ a reinforcing scrim in the invention of Gillies in order to enhance the dimensional stability and

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durability of the reusable incontinence pad. Therefore, said claims are rejected as being obvious over the cited art.

18. Claims 1-23, 25-39, 41-71, 73-81, and 83-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,128,686 issued to Kyle et al. in view of the cited Gillies, Ott, and/or Sternlieb patents.

Kyle discloses an incontinence pad comprising an absorbent hydrophilic layer and a non-absorbent hydrophobic layer (abstract). The absorbent layer is preferably a felt web of rayon fibers (col. 3, lines 9-15). The non-absorbent layer is preferably a needled felt nonwoven of hydrophobic fibers, such as nylon and polyester (col. 4, lines 51-56). The two layers "can be sewn, bonded, quilted or welded" to each other (col. 4, lines 65-66). Additionally, Kyle teaches the use of a scrim layer attached to the absorbent layer (col. 5, lines 1-10). Furthermore, Kyle teaches the use of a barrier sheet adjacent to the absorbent layer (col. 7, lines 57-61).

Thus, Kyle teaches the limitations of Applicant's claims with the exception that the hydrophobic and hydrophilic layers are stitch bonded together. However, as previously noted, Kyle clearly teaches the two layers may be attached by several different methods. As noted in the cited Gillies, Ott, and Sternlieb art, stitch bonding is a well-known method of integrating layers of nonwoven webs. Additionally, it is asserted that it would have been obvious to one of ordinary skill in the art to stitchbond the layers together, as an alternative method of attachment.

Motivation to employ stitch bonding would be the inherent benefits to stitch bonding, such as

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good integrity and dimensional stability, and the added wicking benefit that the stitch yarns would provide. Therefore, said claims are rejected as being obvious over the cited prior art.

19. Claims 24, 40, 72, and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Kyle patent in view of the cited Gillies, Ott, and/or Sternlieb patents, as applied to claims 23, 39, 70, and 80 above, and in further view of the cited Taylor patent.

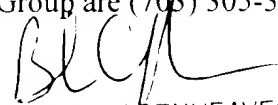
Kyle is silent with respect to the use of an adhesive to attach the barrier layer to the absorbent layer. However, it is well known in the art to adhesively mount a barrier layer to an absorbent layer. For example, Taylor teaches the use of a urethane adhesive to adhere a barrier layer to an absorbent layer of an incontinent pad (col. 7, lines 34-36). Thus, it would have been obvious to one of ordinary skill in the art to employ an adhesive, as is known in the art and evidenced by Taylor, in order to attach the Kyle barrier layer to the absorbent layer, with the expectation of obtaining an integrated laminate incontinent pad.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is (703) 305-4472. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached at (703) 308-2414. Fax numbers for this Group are (703) 305-3601 and (703) 305-7718.

cj 

September 20, 2000


BLAINE COPENHEAVER
PRIMARY EXAMINER